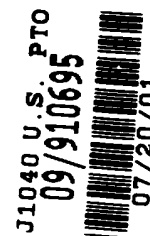


Atty Dkt No. DX0757K  
2790-0757.20  
PATENT

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Susan LaMont  
(Signature of Person Mailing Paper or Fee)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#1/2

In Re Application of:

HEDRICK et al.

Serial No.: CIP of 09/122,585      Group Art Unit: Unassigned

Filing Date: Even Date Herewith      Examiner: Unassigned

Title:      MAMMALIAN CHEMOKINES; RECEPTORS; REAGENTS; USES

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. § 1.97**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The information listed below may be material to the examination of the above-identified application. A completed Form PTO-1449 listing the references identified below accompanies this paper.

All references are of record, or have been submitted in related application serial number 09/122,585 from which the present application claims priority under 35 U.S.C. §120. Thus, pursuant to C.F.R. §1.98(d), copies of the references are not included.

Applicants would appreciate the Examiner's initialing and returning the form to indicate that the references have been reviewed and made of record in the present application. The information includes:

United States Patent No. 5,248,666 issued 9/28/98 to Twardzik *et al.*;

United States Patent No. 5,932,445 issued 8/3/99 to Lal *et al.*;

International Publication No. WO94/12519 published 6/9/94;

International Publication No. WO94/12635 published 6/9/94;

International Publication No. WO95/03318 published 2/2/95;

International Publication No. WO95/04158 published 2/9/95;  
International Publication No. WO95/10538 published 4/20/95;  
International Publication No. WO96/05226 published 2/22/96;  
International Publication No. WO96/13587 published 5/9/96;  
International Publication No. WO96/23225 published 8/1/96;  
International Publication No. WO96/30406 published 10/3/96;  
International Publication No. WO96/37621 published 11/28/96;  
International Publication No. WO96/39434 published 12/12/96;  
International Publication No. WO96/39438 published 12/12/96;  
International Publication No. WO96/40040 published 12/19/96;

Anne L. Angiolillo, *et al.*, "A Role for the Interferon-Inducible Protein 10 in Inhibition of Angiogenesis by Interleukin-12," *Ann. NY Acad. Sci.* 795:158-167 (1996);

Anne L. Angiolillo, *et al.*, "Human Interferon-inducible Protein 10 is a Potent Inhibitor of Angiogenesis In Vivo," *J. Exp. Med.* 182(1):155-162 (1995);

Douglas A. Arenberg, *et al.*, "Interferon- $\gamma$ -inducible Protein 10 (IP-10) Is an Angiostatic Factor That Inhibits Human Non-small Cell Lung Cancer (NSCLC) Tumorigenesis and Spontaneous Metastases," *J. Exp. Med.* 184(3):981-992 (1996);

Masataka Baba, *et al.*, "Identification of CCR6, the Specific Receptor for Novel Lymphocyte-directed CC Chemokine LARC," *J. Biol. Chem.* 272(23):14893-14898 (1997);

Ian Clark-Lewis, *et al.*, "Structural Requirements of Interleukin-8 Function Identified by Design Analogs and CXC Chemokine Hybrids," *J. Biol. Chem.* 269(23):16075-16081 (1994);

Joshua M. Farber, "HuMIG: A NEW HUMAN MEMBER OF THE CHEMOKINE FAMILY OF CYTOKINES," *Biochem. Biophys. Res. Commun.* 192(1):223-230 (1993);

Joshua M. Farber, "A macrophage mRNA selectively induced by  $\gamma$ -interferon encodes a member of the platelet factor 4 family of cytokines," *Proc. Natl. Acad. Sci. USA* 87:5238-5242 (1990);

Reinhold Forster, *et al.*, "A Putative Chemokine Receptor, BLR1, Directs B cell Migration to Defined Lymphoid Organs and Specific Anatomic Compartments of the Spleen," *Cell* 87(6):1037-1047 (1996);

I. Gantz, *et al.*, GenBank, Accession Number L42324 (1997), Definition: "Homo Sapiens (clone GPCR W) G protein-linked receptor gene (GPCR) gene, 5' end of cds.";

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J. Hedrick, *et al.*, GenBank, Accession Number AF001980 (1997), Definition: "Mus musculus beta chemokine mRNA, complete cds.";

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M. Marra, *et al.*, GenBank, Accession Number AA185904 (1997), Definition: "mu54a03.r1 Soares mouse lymph node NbMLN Mus musculus cDNA clone IMAGE:643180 5', mRNA sequence.";

M. Marra, *et al.*, GenBank, Accession Number AA423677 (1997), Definition: "ve77d08.r1 Soares mouse mammary gland NbMMG Mus musculus cDNA clone IMAGE:832239 5' similar to TR:G1066731 G1066731 G PROTEIN-LINKED RECEPTOR;, mRNA sequence.";

M. Marra, *et al.*, GenBank, Accession Number AA466996 (1997), Definition: "ve71a08.r1 Soares mouse mammary gland NbMMG Mus musculus cDNA clone IMAGE:831638 5', mRNA sequence.";

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A.H. Sarris, *et al.*, "Human recombinant interferon-inducible protein-10 inhibits the proliferation of normal and acute myelogenous leukemia progenitors," *Leukemia* 10(5):757-765 (1996);

Cecilia Sgadari, *et al.*, "Mig, the Monokine Induced By Interferon- $\gamma$ , Promotes Tumor Necrosis in Vivo," *Blood* 89(8):2635-2643 (1997);

Cecilia Sgadari, *et al.*, "Interferon-inducible protein-10 identified as a mediator of tumor necrosis in vivo," *Proc. Natl. Acad. Sci. USA* 93(24):13791-13796 (1996);

R.M. Streiter, *et al.*, "INTERFERON Y-INDUCIBLE PROTEIN 10 (IP-10), A MEMBER OF THE C-X-C CHEMOKINE FAMILY, IS AN INHIBITOR OF ANGIOGENESIS," *Biochem. Biophys. Res. Commun.* 210(1):51-57 (1995);

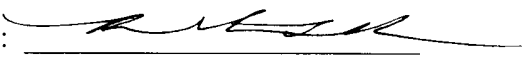
Robert M. Streiter, *et al.*, "Role of C-X-C chemokines as regulators of angiogenesis in lung cancer," *J. Leuk. Biol.* 57:752-762 (1995);

S. Tanabe, *et al.*, GenBank, Accession Number AF006637 (1997), Definition: "Mus musculus beta-chemokine TCA4 mRNA, complete cds.";

Padmavathy Vanguri & Joshua M. Farber, "Identification of CRG-2," *J. of Biol. Chem.* 265(25):15049-15057 (1990).

This Information Disclosure Statement under 37 CFR § 1.97 is not to be construed as a representation that: (i) a search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

Respectfully submitted,

Date: 7/20/01 By: 

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FORM PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO.: DX0757K	SERIAL NO.: Unassigned	
<b>INFORMATION DISCLOSURE STATEMENT FOR PATENT</b> <i>(Use several sheets if necessary)</i>				APPLICANT: <b>Joseph A. Hedrick, et al.</b>		
				FILING DATE: Even Date Herewith	GROUP: Unassigned	
<b>U.S. PATENT DOCUMENTS</b>						
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
<b>FOREIGN PATENT DOCUMENTS</b>						
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
						X
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>						
	BK	Anne L. Angiolillo, et al., <u>Ann. NY Acad. Sci.</u> , 795:158-167, October 31, 1996. "A Role for the Interferon-Inducible Protein 10 in Inhibition of Angiogenesis by Interleukin-12"				
	BL	Anne L. Angiolillo, et al., <u>J. Exp. Med.</u> , 182(1):155-162, July 1, 1995. "Human Interferon-inducible Protein 10 is a Potent Inhibitor of Angiogenesis In Vivo"				
	BM	Douglas A. Arenberg, et al., <u>J. Exp. Med.</u> , 184(3):981-992, September 1, 1996. "Interferon- $\gamma$ -inducible Protein 10 (IP-10) Is an Angiostatic Factor That Inhibits Human Non-small Cell Lung Cancer (NSCLC) Tumorigenesis and Spontaneous Metastases"				
	BN	Masataka Baba, et al., <u>J. Biol. Chem.</u> , 272(23):14893-14898, June 6, 1997. "Identification of CCR6, the Specific Receptor for a Novel Lymphocyte-directed CC Chemokine LARC"				
	BO	Ian Clark-Lewis, et al., <u>J. Biol. Chem.</u> , 269(23):16075-16081, June 10, 1994. "Structural Requirements for Interleukin-8 Function Identified by Design Analogs and CXC Chemokine Hybrids"				
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	BQ	Joshua M. Farber, <u>Proc. Natl. Acad. Sci. USA</u> , 87:5238-5242, July 1990. "A macrophage mRNA selectively induced by $\gamma$ -interferon encodes a member of the platelet factor 4 family of cytokines"				
	BR	Reinhold Förster, et al., <u>Cell</u> , 87(6):1037-1047, December 13, 1996. "A Putative Chemokine Receptor, BLR1, Directs B cell Migration to Defined Lymphoid Organs and Specific Anatomic Compartments of the Spleen"				
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	BT	I. Gantz, et al., <u>GenBank</u> , Accession Number L42326, August 6, 1997. Definition: "Canis familiaris (clone GPCR W) DNA fragment."				
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						

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07/20/01

FORM PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO.: DX0757K	SERIAL NO.: Unassigned
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
	BU	J. Hedrick, et al., <u>GenBank</u> , Accession Number AF001979, November 20, 1997. Definition: "Homo sapiens beta chemokine mRNA, complete cds."			
	BV	J. Hedrick, et al., <u>GenBank</u> , Accession Number AF001980, November 20, 1997. Definition: "Mus musculus beta chemokine mRNA, complete cds."			
	BW	Kunio Hieshima, et al., <u>J. Biol. Chem.</u> , 272(9):5846-5853, February 28, 1997. "Molecular Cloning of a Novel Human CC Chemokine Liver and Activation-regulated Chemokine (LARC) Expressed in Liver"			
	BX	Robert Hromas, et al., <u>Blood</u> , 89(9):3315-3322, May 1, 1997. "Cloning and Characterization of Exodus, a Novel $\beta$ -Chemokine"			
	BY	R. Hromas, et al., <u>GenBank</u> , Accession Number U88320, December 18, 1997. Definition: "Human beta chemokine Exodus-2 mRNA, complete cds."			
	BZ	R. Hromas, et al., <u>GenBank</u> , Accession Number U88322, June 1, 1998. Definition: "Mus musculus beta chemokine Exodus-2 mRNA, complete cds."			
	CA	Marcel Loetscher, et al., <u>J. Experimental. Medicine</u> , 184:963-969, September 1996. "Chemokine Receptor Specific for IP10 and Mig: Structure, Function and Expression in Activated T-Lymphocytes"			
	CB	Andrew D. Luster, et al., <u>NATURE</u> , 315:672-676, June 20, 1985. "γ-Interferon transcriptionally regulates an early-response gene containing homology to platelet proteins"			
	CC	M. Marra, et al., <u>GenBank</u> , Accession Number AA177904, February 16, 1997. Definition: "mt05c02.r1 Soares mouse 3NbMS Mus musculus cDNA clone IMAGE:620162 5', mRNA sequence."			
	CD	M. Marra, et al., <u>GenBank</u> , Accession Number AA185904, January 9, 1997. Definition: "mu54a03.r1 Soares mouse lymph node NbMLN Mus musculus cDNA clone IMAGE:643180 5', mRNA sequence."			
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	CF	M. Marra, et al., <u>GenBank</u> , Accession Number AA466996, June 11, 1997. Definition: "ve71a08.r1 Soares mouse mammary gland NbMMG Mus musculus cDNA clone IMAGE:831638 5', mRNA sequence."			
	CG	NCI-CGAP (Robert Strausberg), <u>GenBank</u> , Accession Number AA258793, August 13, 1997. Definition: "zs32c03.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686884 3' similar to TR:G1066731 G1066731 G PROTEIN-LINKED RECEPTOR ;, mRNA sequence."			
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CH	NCI-CGAP (Robert Strausberg), <u>GenBank</u> , Accession Number AA258898, August 13, 1997. Definition: "zs32c03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686884 5' similar to TR:G1066731 G1066731 G PROTEIN-LINKED RECEPTOR ;, mRNA sequence."				
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CM	R. M. Streiter, <i>et al.</i> , <u>Biochem. Biophys. Res. Commun.</u> , 210(1):51-57, May 5, 1995. "INTERFERON $\gamma$ -INDUCIBLE PROTEIN 10 (IP-10), A MEMBER OF THE C-X-C CHEMOKINE FAMILY, IS AN INHIBITOR OF ANGIOGENESIS"				
CN	Robert M. Streiter, <i>et al.</i> , <u>J. Leuk. Biol.</u> , 57:752-762, May 1995. "Role of C-X-C chemokines as regulators of angiogenesis in lung cancer"				
CO	S. Tanabe, <i>et al.</i> , <u>GenBank</u> , Accession Number AF006637, June 22, 1997. Definition: "Mus musculus beta-chemokine TCA4 mRNA, complete cds."				
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	CQ	5,248,666	9/28/93	Twardzik, et al.			
	CR	5,932,445	8/3/99	Lal, et al.			
<b>FOREIGN PATENT DOCUMENTS</b>							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
						YES	NO
	CS	WO 94/12519	6/9/94	PCT		X	
	CT	WO 94/12635	6/9/94	PCT		X	
	CU	WO 95/03318	2/2/95	PCT		X	
	CV	WO 95/04158	2/9/95	PCT		X	
	CW	WO 95/10538	4/20/95	PCT		X	
	CX	WO 96/05226	2/22/96	PCT		X	
	CY	WO 96/13587	5/9/96	PCT		X	
	CZ	WO 96/23225	8/1/96	PCT		X	
	DA	WO 96/30406	10/3/96	PCT		X	
	DB	WO 96/37621	11/28/96	PCT		X	
	DC	WO 96/39434	12/12/96	PCT		X	
	DD	WO 96/39438	12/12/96	PCT		X	
	DE	WO 96/40040	12/19/96	PCT		X	
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